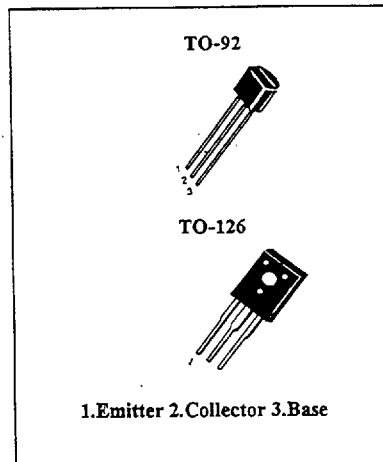


**AUDIO FREQUENCY POWER AMPLIFIER
LOW SPEED SWITCHING**

- Complement to 2SD882

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Characteristic	Symbol	2SB772S Max	2SB772 Max	Unit
Collector-Base Voltage	V _{CB0}	-50	-50	V
Collector-Emitter Voltage	V _{CE0}	-40	-40	V
Emitter-Bias Voltage	V _{EBO}	-5	-5	V
Collector Current (DC)	I _C	-2	-3	A
*Collector Current (Pulse)	I _C	-5	-7	A
Base Current (DC)	I _B	-0.6	-0.6	A
Collector Dissipation (Ta=25°C)	P _C	-	10	W
Collector Dissipation (Tc=25°C)	P _C	1	1	W
Junction Temperature	T _j	150	150	°C
Storage Temperature	T _{stg}	-55~150	-55~150	°C



- PW ≤ 10 μs, Duty Cycle ≤ 50%

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

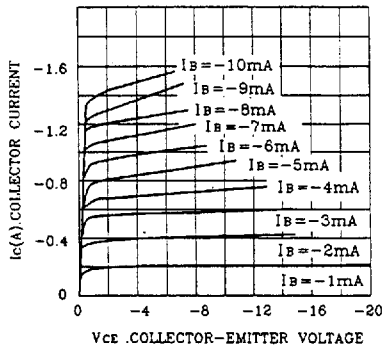
Characteristics	Symbol	Test condition	Min	Typ	Max	Unit
Collector Cutoff Current	I _{CB0}	V _{CB} = -30V, I _B = 0			-1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} = -3V, I _C = 0			-1	μA
*DC Current Gain	h _{FE1}	V _{CE} = -2V, I _C = -20mA	30	220		
	h _{FE2}	V _{CE} = -2V, I _C = -1A	60	160	400	
*Collector Emitter Saturation Voltage	V _{CE(SAT)}	I _C = -2A, I _B = -0.2A		-0.3	-0.45	V
*Base Emitter Saturation Voltage	V _{BE(SAT)}	I _C = -2A, I _B = -0.2A		-1.0	-2.0	V
Current Gain Bandwidth Product	f _T	V _{CE} = -5V, I _C = 0.1A		80		MHz
Output Capacitance	C _{ob}	V _{CB} = -10V, I _B = 0 f = 1MHz		55		pF
Noise Figure	NF	V _{CE} = 10V, I _C = 1mA R _s = 10KΩ, f = 1KHz		4		dB

- Pulse Test PW ≤ 350 μs, Duty Cycle ≤ 2%

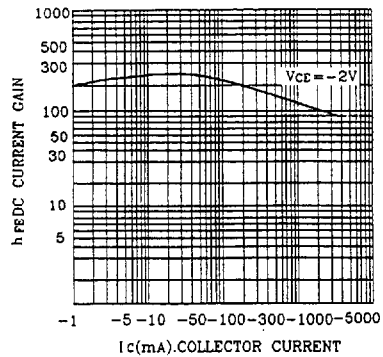
h_{FE}(2) CLASSIFICATION

Classification	R	O	Y	G
h _{FE} (2)	60-120	100-200	160-320	200-400

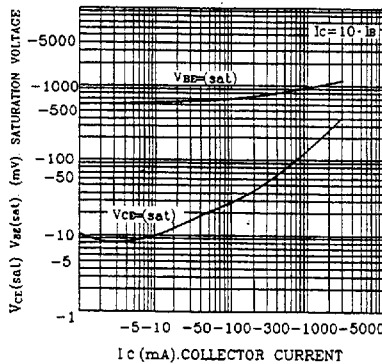
STATIC CHARACTERISTIC



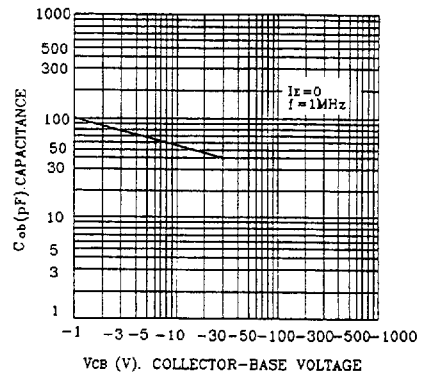
DC CURRENT GAIN



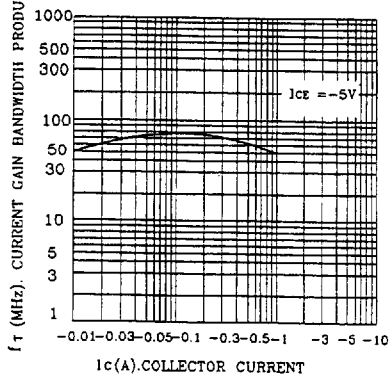
BASE-EMITTER SATURATION VOLTAGE COLLECTOR-EMITTER SATURATION VOLTAGE



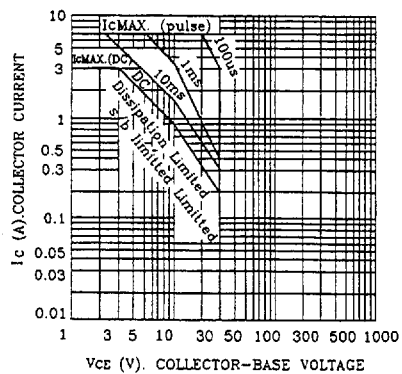
COLLECTOR OUTPUT CAPACITANCE



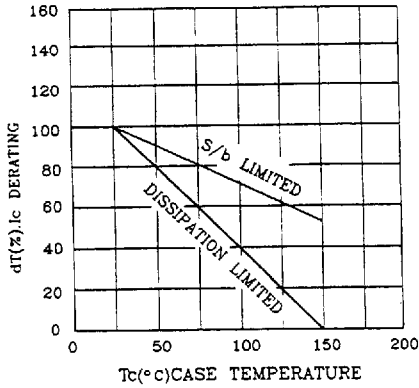
CURRENT GAIN-BANDWIDTH PRODUCT



SAFE OPERATING AREAS



DERATING CURVE OF SAFE OPERATING AREAS



POWER DERATING

